App. Ser. No. 10/634,779
Docket No. SH-0037US
RYU.014

AMENDMENTS TO THE CLAIMS:

Please cancel claims 11-19 without prejudice or disclaimer and amend the claims as follows:

1. (Currently amended) An optical fiber preform ~~pre-form~~ from which an optical fiber is made by drawing, the optical fiber preform comprising at least one layer and ~~pre-form~~ having a maximum value V_0 [log(poise)] of a radial viscosity distribution which is greater than 7.60 [log(poise)] at a temperature T_s which is a temperature at which the maximum value V_0[log(poise)] of radial viscosity distribution of the optical fiber in inside area is 7.60 [log(poise)] in inside and outside area equivalent to two times of mode field diameter on which light at wavelength of about 1385nm propagates through an optical fiber made by drawing the preform ~~pre-form~~.

2. (Currently amended) An optical fiber preform as claimed in claim 1, wherein the preform includes ~~has~~ a multi-layer ~~multi layer~~ structure comprising at least two clad layers including an inner clad layer having a first viscosity at a predetermined temperature and an outer clad layer having a second viscosity at said predetermined temperature, ~~and~~ said second viscosity being ~~is~~ greater than said first viscosity.

3. (Currently amended) An optical fiber preform as claimed in claim 2, wherein said inner clad layer comprises ~~is formed from~~ synthetic quartz glass and said outer clad layer comprises ~~is formed from~~ quartz glass containing crystal type silica.

4. (Currently amended) An optical fiber preform as claimed in claim 3, wherein said quartz glass containing crystal type silica as a high viscosity clad layer comprises ~~is~~ native quartz or crystallization synthetic quartz glass.

5. (Currently amended) An optical fiber preform as claimed in claim 2, wherein said inner

clad layer comprises ~~is formed from~~ synthetic quartz glass having a lower viscosity than pure synthetic quartz glass by being doped with at least one dopant selected from the group ~~of dopants essentially~~ consisting of chlorine, germanium, fluorine, and phosphorus, and said outer clad layer comprises ~~is formed from~~ synthetic quartz glass having a higher viscosity than the inner clad layer by not being doped or doped with small amount of dopant.

6. (Currently amended) An optical fiber preform as claimed in claim 1, wherein said ~~a~~ maximum value V_0 of said radial viscosity distribution is greater than 7.90 [log(poise)].

7. (Currently amended) An optical fiber preform as claimed in claim 1 ~~2~~, wherein said at least one layer ~~in which a clad~~ comprises at least two layers including an inner clad layer and an outer clad layer with high viscosity.

8. (Currently amended) An optical fiber preform as claimed in claim 1, wherein said at least one layer comprises an ~~the~~ outermost clad layer having ~~has~~ a viscosity less than V_0 at the temperature T_s.

9. (Original) An optical fiber preform as claimed in claim 1, wherein a surface of the optical fiber preform has a viscosity at temperature T_s which is lower than V_0.

10. (Currently amended) An optical fiber preform as claimed in claim 1, wherein a portion of said preform which includes ~~containing~~ at least a core and an inner clad layer is formed by one of vapor axial deposition (VAD), outside vapor deposition (OVD), modified chemical vapor deposition (MCVD), plasma chemical vapor deposition (PCVD) ~~VAD method, OVD method, MCVD method, and PCVD method~~, and a combination of any of these ~~or by an appropriate combination thereof~~.

Claims 11-19. (Canceled)

20. (Currently amended) An optical fiber manufactured by heating and drawing a preform, said preform including at least one layer and having a maximum value V_0 [log(poise)] of a radial viscosity distribution which is greater than 7.60 [log(poise)] at a temperature T_s which is a temperature at which the maximum value V_0[log(poise)] of radial viscosity distribution of the optical fiber in inside area is 7.60 [log(poise)] in inside and outside area equivalent to two times of mode field diameter on which light at wavelength of about 1385nm propagates through an optical fiber made by drawing the preform ~~pre-form~~.

21. (Currently amended) An optical fiber as claimed in claim 20, wherein a transmission loss at wavelength of 1385 nm is equal to or less than 0.36db/km~~, preferably equal to or less than 0.30 dB/km~~.

22. (Currently amended) An optical fiber as claimed in claim 20, wherein a transmission loss at wavelength of 1385 nm is equal to or less than 0.35db/km, in a case that said optical fiber is exposed to atmosphere containing 1% hydrogen for four days.

23. (Currently amended) An optical fiber as claimed in claim 20, wherein a transmission loss at wavelength of 1385 nm, in a case that the optical fiber is exposed to atmosphere containing 1% hydrogen for four days, does not substantially change compared with transmission loss at wavelength of 1385 nm before being exposed to the atmosphere.

24. (New) An optical fiber as claimed in claim 20, wherein said transmission loss at a wavelength of 1385 nm is no greater than 0.30db/km.

25. (New) An optical fiber preform as claimed in claim 1, wherein said at least one layer comprises:

an inner clad layer formed on a core and having a first viscosity at said temperature, T_s; and

an outer clad layer formed on said inner clad layer and having a second viscosity at said

temperature, T_s, said second viscosity being greater than said first viscosity.

26. (New) An optical fiber preform as claimed in claim 25, wherein said core comprises guartz glass doped with germanium, such that said temperature T_s is about 1600 °C.

27. (New) An optical fiber preform as claimed in claim 25, wherein said at least one layer further comprises:

another outer clad layer formed on said outer clad layer and having a third viscosity which is lower than said second viscosity.

28. (New) An optical fiber preform as claimed in claim 2, wherein a diameter of said inner clad layer is less than 80% of an outer diameter of said preform.

29. (New) A preform for an optical fiber, said preform comprising:

a plurality of layers, a maximum value, V_0, of a radial viscosity distribution in said plurality of layers being greater than 7.60 [log(poise)] at a temperature, T_s,

wherein T_s is a temperature at which the maximum value, V_0, of radial viscosity distribution of an inside area of the optical fiber is 7.60 [log(poise)].